Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of correcting reflectance values measured for different test products within a reflectance-based instrument, the method comprising the steps of:

A. for a first test product analyzed by the reflectance based instrument, determining a reflectance constant ~~for a test product~~ at a first wavelength for which reflectance does not substantially change with the presence of a test substance;

B. with the test product loaded with the test substance, determining a maximized SNR reflectance at a second wavelength for which signal-to-noise ratio is maximized and determining a measured reflectance at the first wavelength; and

C. determining a corrected reflectance as the product of the maximized SNR reflectance with a ratio of the reflectance constant to the measured reflectance.

2. (Original) The method of claim 1 wherein the test substance is an analyte.

3. (Original) The method of claim 1 wherein the test product is a test strip comprising a plurality of test pads.

4. (Original) The method of claim 1 wherein the test product is a reagent cassette.

5. (Original) The method of claim 1 wherein the measured reflectance is determined with a pulse scan at the second wavelength.

6. (Currently Amended) The method of claim 1 wherein the ~~reference~~ reflectance constant is determined with a pulse scan at the first wavelength.

7. (Currently Amended) The method of claim 1 wherein the ~~reference~~ reflectance constant is determined before conditions relative to a concentration of the test substance substantially changes from the time the measured reflectance was determined.

8. (Currently Amended) A reflectance-based system including reflectance correction for different test products within a reflectance-based instrument, the system comprising:

A. transmitters for transmitting signals at different wavelengths to a test product and detectors configured for detecting reflectance at the different wavelengths from the test product;

B. a set of storage devices configured for storing reflectance values;

C. a set of processors configured to execute a program configured to implement a method of correcting reflectance comprising the steps of:

i) determining a reflectance constant for the test product at a first wavelength for which reflectance does not substantially change with the presence of a test substance;

ii) with the test product loaded with the test substance, determining a maximized SNR reflectance at a second wavelength for which signal-to-noise ratio is maximized and determining a measured reflectance at the first wavelength; and

iii) determining a corrected reflectance as the product of the maximized SNR reflectance with a ratio of the reflectance constant to the measured reflectance.

9. (Original) The system of claim 8 wherein the test substance is an analyte.

10. (Original) The system of claim 8 wherein the test product is a test strip comprising a plurality of test pads.

11. (Original) The system of claim 8 wherein the test product is a reagent cassette.

12. (Original) The system of claim 8 wherein the measured reflectance is determined with a pulse scan at the second wavelength.

13. (Currently Amended) The system of claim 8 wherein the ~~reference~~ reflectance constant is determined with a pulse scan at the first wavelength.

14. (Currently Amended) The system of claim 8 wherein the ~~reference~~ reflectance constant is determined before conditions relative to a concentration of the test substance substantially changes from the time the measured reflectance was determined.

15. (Currently Amended) A computer readable program product ~~code~~ embodying instructions for execution by at least one processor to perform a method for correcting reflectance values measured for different test products in a reflectance-based device comprising transmitters for transmitting signals at different wavelengths to a test product and detectors configured for detecting reflectance at the different wavelengths from the test product, and a set of storage devices configured for storing reflectance values, the method comprising:

A. determining a reflectance constant for a test product at a first wavelength for which reflectance does not substantially change with the presence of a test substance;

B. with the test product loaded with the test substance, determining a reflectance at a second wavelength for which signal-to-noise ratio is maximized and determining a measured reflectance at the first wavelength; and

C. determining a corrected reflectance as the product of the reflectance with a ratio of the reflectance constant to the measured reflectance.

16. (Original) The computer program product of claim 15 wherein the test substance is an analyte.

17. (Original) The computer program product of claim 15 wherein the test product is a test strip comprising a plurality of test pads.

18. (Original) The computer program product of claim 15 wherein the test product is a reagent cassette.

19. (Currently Amended) A reflectance-based system including reflectance correction for different test products, the system comprising:

A. transmitters for transmitting signals at different wavelengths to a test product and detectors configured for detecting reflectance at the different wavelengths from the test product;

B. a set of storage devices configured for storing reflectance values;

C. means for determining a reflectance constant for the test product at a first wavelength for which reflectance does not substantially change with the presence of a test substance;

D. with the test product loaded with the test substance, means for determining a maximized SNR reflectance at a second wavelength for which signal-to-noise ratio is maximized and means for determining a measured reflectance at the first wavelength; and

E. means for determining a corrected reflectance as the product of the maximized SNR reflectance with a ratio of the reflectance constant to the measured reflectance.

20. (Original) The system of claim 19 wherein the test substance is an analyte.

21. (Original) The system of claim 19 wherein the test product is a test strip comprising a plurality of test pads.

22. (Original) The system of claim 19 wherein the test product is a reagent cassette.

23. (New) The method of claim 1 further comprising repeating steps A through C for a second test product.

24. (New) The method of claim 1 wherein step C, determining a corrected reflectance, comprises determining a corrected reflectance value according to the following equation:

$$R_{\lambda' c} = [R_{\lambda\text{-const}} / R_{\lambda\text{-meas}}] * R_{\lambda'},$$

where $R_{\lambda' c}$ is the corrected reflectance value for a given wavelength or broadband filter, $R_{\lambda\text{-const}}$ is the corrected reflectance value constant for the wavelength λ, wherein λ is a wavelength unresponsive to analyte concentration, $R_{\lambda'}$ is the maximized SNR reflectance value measured using the wavelength with the highest signal to noise, λ', and $R_{\lambda\text{-meas}}$ is the measured reflectance value at wavelength λ.

25. (New) The system of claim 8 wherein the set of processors are configured to execute steps (i)-(iii) for a second test product.

26. (New) The system of claim 8 wherein the set of processors are configured to execute determining a corrected reflectance value according to the following equation:

$$R_{\lambda' c} = [R_{\lambda\text{-const}} / R_{\lambda\text{-meas}}] * R_{\lambda'},$$

where $R_{\lambda' c}$ is the corrected reflectance value for a given wavelength or broadband filter, $R_{\lambda\text{-const}}$ is the corrected reflectance value constant for the wavelength λ, wherein λ is a wavelength unresponsive to analyte concentration, $R_{\lambda'}$ is the maximized SNR reflectance value measured using the wavelength with the highest signal to noise, λ', and $R_{\lambda\text{-meas}}$ is the measured reflectance value at wavelength λ.

27. (New) The program product of claim 15 further comprising instructions for repeating steps A through C for a second test product.

28. (New) The program product of claim 15 wherein instructions for step C, determining a corrected reflectance, comprise instructions for determining a corrected reflectance value according to the following equation:

$$R_{\lambda' c} = [R_{\lambda\text{-const}} / R_{\lambda\text{-meas}}] * R_{\lambda'},$$

where $R_{\lambda' c}$ is the corrected reflectance value for a given wavelength or broadband filter, $R_{\lambda\text{-const}}$ is the corrected reflectance value constant for the wavelength λ, wherein λ is a wavelength unresponsive to analyte concentration, $R_{\lambda'}$ is the maximized SNR reflectance value measured using the wavelength with the highest signal to noise, λ', and $R_{\lambda\text{-meas}}$ is the measured reflectance value at wavelength λ.

29. (New) The system of claim 19 wherein the transmitters and receivers are configured for use with a second test product.

30. (New) The system of claim 19, wherein the means for determining a corrected reflectance is configured to determine the corrected reflectance value according to the following equation:

$$R_{\lambda' c} = [R_{\lambda\text{-const}} / R_{\lambda\text{-meas}}] * R_{\lambda'},$$

where $R_{\lambda' c}$ is the corrected reflectance value for a given wavelength or broadband filter, $R_{\lambda\text{-const}}$ is the corrected reflectance value constant for the wavelength λ, wherein λ is a wavelength unresponsive to analyte concentration, $R_{\lambda'}$ is the maximized SNR reflectance value measured using the wavelength with the highest signal to noise, λ', and $R_{\lambda\text{-meas}}$ is the measured reflectance value at wavelength λ.